

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Division - Watershed Management Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: MORRILL POND #2	Lake Area (ha): 11.29
Town: CANTERBURY	Maximum depth (m): 1.2
County: Merrimack	Mean depth (m): 0.4
River Basin: Merrimack	Volume (m ³): 44000
Latitude: 43°19'30" N	Relative depth: 0.3
Longitude: 71°32'22" W	Shore configuration: 1.34
Elevation (ft): 487	Areal water load (m/yr): 32.12
Shore length (m): 1600	Flushing rate (yr ⁻¹): 82.00
Watershed area (ha): 794.0	P retention coeff.: 0.42
% watershed ponded: 0.6	Lake type: artificial

BIOLOGICAL:

6 February 2003

19 June 2002

DOM. PHYTOPLANKTON (% TOTAL)	#1	NO WINTER	DINOBYRON 90%
	#2	PLANKTON COLLECTED	CHRYSOSPHAERELLA 3%
	#3		UROGLENOPSIS 3%
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			7.51
DOM. ZOOPLANKTON (% TOTAL)	#1		KERATELLA 34%
	#2		PROTOZOAN SPP. 19%
	#3		
ROTIFERS/LITER			63
MICROCRUSTACEA/LITER			<1
ZOOPLANKTON ABUNDANCE (#/L)			126
VASCULAR PLANT ABUNDANCE			Very abundant
SECCHI DISK TRANSPARENCY (m)			1.0
BOTTOM DISSOLVED OXYGEN (mg/L)		13.9	8.2
BACTERIA (E. coli, #/100 ml)	#1		2
	#2		< 2
	#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None
Hypolimnion volume (m³) : None
Anoxic volume (m³) : None

CHEMICAL:Lake: MORRILL POND #2
Town: CANTERBURY

	6 February 2003		19 June 2002		
DEPTH (m)	1.0		1.0		
pH (units)	6.0		6.3		
A.N.C. (Alkalinity)	6.3		4.8		
NITRATE NITROGEN	< 0.05		< 0.05		
TOTAL KJELDAHL NITROGEN	0.50		0.50		
TOTAL PHOSPHORUS	0.013		0.028		
CONDUCTIVITY (μ mhos/cm)	99.5		59.0		
APPARENT COLOR (cpu)	60		90		
MAGNESIUM			0.89		
CALCIUM			2.4		
SODIUM			8.5		
POTASSIUM			< 0.40		
CHLORIDE	17		13		
SULFATE	7		3		
TN : TP	38		18		
CALCITE SATURATION INDEX			3.9		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 2002

D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
**	5	6	1	12	Eutro.

COMMENTS:

1. Unimproved access over the bank for a canoe or small boat.
2. Road to access point was marked with a Fish & Game sign.
3. Pond was completely undeveloped.
4. Dam was recently re-built.
5. This is a dark tea-colored, shallow, eutrophic pond with very abundant rooted plant growth.

Morrill Pond #2

Canterbury

III-152

All depths less than 5 feet



0 0.05 0.1 Kilometers

A horizontal scale bar with three segments. The first segment is labeled '0', the second '0.05', and the third '0.1 Kilometers'.

[illegible]

Canterbury

Wetland

0 0.05 0.1 Kilometers

[illegible]

III-155